

Water-Data Report 2008

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°21'43", long 74°32'42" referenced to North American Datum of 1983, So Brunswick Twp, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on New Road, 820 ft north from Friendship Road, 1.2 mi south from Monmouth Junction, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--3.81 mi².

WATER-QUALITY RECORDS

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 10.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Turbidity white light, det ang 90+/> corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)
Nov									
29...	0930	Surface water, regular	3.7	.689	.557	762	6.1	47	6.6
29...	0930	QC - Surface water, split replicate	--	--	--	--	--	--	--
29...	0931	QC - Surface water, concurrent replicate	--	--	--	--	--	--	--
Mar									
03...	1045	Surface water, regular	2.1	.205	.156	766	11.5	88	6.6
Jun									
17...	0945	Surface water, regular	6.7	.657	.519	754	2.5	28	6.8
Aug									
20...	0900	Surface water, regular	4.1	.353	.273	765	4.5	48	6.5

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specific conductance, wat unf $\mu\text{S}/\text{cm}$		Temper-ature, air, deg C		Temper-ature, water, deg C		Hard-ness, water, mg/L as CaCO ₃		Magnes-ium, water, mg/L		Potas-sium, water, mg/L		Sodium, water, mg/L		ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃		Chlor-ide, water, mg/L		Fluor-ide, water, mg/L		Silica, water, mg/L as SiO ₂		Sulfate water, mg/L	
	25 degC (00095)	(00020)	(00010)	(000900)	(00915)	(00925)	(00935)	(00930)	(009410)	(00940)	(00950)	(00955)	(00945)	(00940)	(00950)	(00950)	(00950)	(00950)	(00950)	(00950)	(00950)			
Nov																								
29...	111	10.0	4.8	25	6.33	2.29	3.21	10.6	22	15.0	<.12	7.9	5.39											
29...	--	--	--	24	5.90	2.20	3.30	10.0	23	16.0	.14	--	5.2											
29...	--	--	--	24	5.90	2.20	3.20	10.0	23	17.0	.16	--	5.2											
Mar																								
03...	200	15.0	4.0	23	5.52	2.23	1.42	27.1	9	42.0	E.07	7.7	10.5											
Jun																								
17...	151	25.0	20.1	26	6.40	2.32	2.40	17.0	22	24.0	E.10	7.1	4.46											
Aug																								
20...	280	16.5	18.8	32	8.89	2.48	2.41	40.1	14	65.0	E.06	4.0	7.45											

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Residue water, fltrd, sum of constituents	Residue on evap.	Residue total	Ammonia + org-N, water, fltrd, mg/L	Ammonia + org-N, water, unfltrd mg/L	Ammonia water, fltrd, mg/L	Nitrate + nitrite water, fltrd, mg/L	Particulate nitrogen, susp, water, fltrd, mg/L	Total nitrogen, water, fltrd, mg/L	Total nitrogen, water, unfltrd mg/L	Orthophosphate, water, fltrd, mg/L	Phosphorus, water, fltrd, mg/L	Phosphorus, water, unfltrd mg/L
	180degC wat flt	180degC	mg/L (00530)	(00623)	(00625)	(00608)	(00631)	(49570)	(00602)	(00600)	(00671)	(00666)	(00665)
Nov													
29...	64	94	6	.59	--	.022	<.04	.05	--	--	.012	.038	.055
29...	57	110	<10	1.2	1.6	<.050	<.050	--	--	--	.043	<.050	.054
29...	58	110	<10	1.1	1.6	<.050	<.050	--	--	--	.041	<.050	<.050
Mar													
03...	E105	119	1	.26	--	.024	.57	.05	.84	.88	<.010	.010	.018
Jun													
17...	E78	118	7	.99	--	.354	.18	.23	1.2	1.4	E.008	.068	.115
Aug													
20...	E139	168	6	.57	--	.093	.08	.11	.65	.77	E.008	.031	.066

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorgnic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic water, filtrd, mg/L (00681)	Arsenic water, filtrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)	Barium, recover -able, µg/L (01007)	Beryllium, water, unfltrd recover -able, µg/L (01012)	Boron, water, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium, water, unfltrd recover -able, µg/L (01027)	Chromium, water, unfltrd recover -able, µg/L (01034)	Copper, water, unfltrd recover -able, µg/L (01042)
Nov													
29...	.8	<.04	.8	14.8	--	--	--	--	18	--	--	--	--
29...	--	--	--	15.0	--	--	--	--	17	--	--	--	--
29...	--	--	--	15.0	--	--	--	--	16	--	--	--	--
Mar													
03...	.4	<.04	.4	5.1	.43	E.53	62.8	.17	9.6	8	.10	.57	E1.2
Jun													
17...	1.6	<.04	1.6	11.4	--	--	--	--	16	--	--	--	--
Aug													
20...	.9	<.04	.9	7.2	1.4	1.9	64.4	.06	18	11	.02	.42	2.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Mangan-							
	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	ese, water, unfltrd recover -able, µg/L (01055)	Mercury, water, unfltrd recover -able, µg/L (71900)	Nickel, water, unfltrd recover -able, µg/L (01067)	Selen- ium, water, unfltrd recover -able, µg/L (01147)	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, unfltrd recover -able, µg/L (01092)
Nov								
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
Mar								
03...	501	.45	45.6	<.010	1.5	E.08	<.02	23.1
Jun								
17...	--	--	--	--	--	--	--	--
Aug								
20...	1,080	1.07	48.7	<.010	1.0	.16	<.02	6.9